

What is a Good Guiding Question?

Choosing the right questions can lead learners to higher, more meaningful achievement.

Many cherished school curriculum units are intellectually weak and fragmented because teachers and students really do not know what students are supposed to learn. Consider, for example, the typical elementary unit on ancient Egypt. In this curriculum, kids learn about the pharaohs, the pyramids, Egyptian myths, and geography. They examine hieroglyphs, view the video *Treasures of Tutankhamen*, and make papyrus-like paper. This hopping from activity to activity goes on until the teacher decides it is time to study something else. Unfortunately, the intellectual outcome is a group of youngsters who recall pieces of information: a pharaoh's name, a strange custom, or a mental picture of the Sphinx. When these students and teachers are asked what they've been doing for the past few weeks, the answer is usually, "We studied the ancient Egyptians." But one can study forever and not get anywhere when the goal of learning is not clear. Hundreds of teachers working with me in school-based curriculum development teams in recent years have affirmed this concern. Regardless of how carefully the individual activities and lessons are crafted, on close inspection, the curriculums reveal a lack of intellectual focus and coherence because the goals of study are not explicit.

A key component that we have found absent from the curriculum design is the guiding question.¹ A guiding question is the fundamental query that directs the search for understanding. Everything in the curriculum is studied for the purpose of answering it. As a result of this function, guiding questions can direct the curriculum author's choice of ideas and activities and can transform the often disparate topics from a scattered survey of the subject, problem, or theme, into a logical, coordinated instrument for attaining knowledge. In addition, when a team, rather than an individual, develops a curriculum, guiding questions can help orchestrate the goals and expertise of the team members.

With this in mind, imagine the improvement in the ancient Egyptian unit if the teacher and students had posed a well-designed question, such as "What is a good life for ancient Egyptians?" or "Where did the ancient Egyptians come from?" and "Where did they go?" With these kinds of queries, myths, pharaohs, the Nile, pyramid building, Ra, craftspeople, and everything else in the unit serve a purpose because they are needed to answer the question that everyone is asking.

Guiding a Curriculum Team

Consider the power of a guiding question in the following example from a 9th grade cluster team in southeastern Massachusetts. The teachers, whose subject areas are biology, English, mathematics, social studies, and Spanish, agree that "endangered species" is a rich, relevant topic for their students. In the usual scenario for a team-written curriculum, the teachers, having agreed on the topic, would go their separate ways, teaching about endangered species according to their particular disciplines. As a result, their students would probably realize that



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their teachers are doing something vaguely in common, but that there certainly isn't any explicit connection or intellectual coherence from teacher to teacher, subject to subject, or test to test. To promote a different outcome, however, the team develops a guiding question based on endangered species. The question "Who will survive?" is employed in the following way. When the English teacher selects narrative accounts, she chooses them to explore how American culture values some organisms more than others. The social studies teacher examines the *Endangered Species Act* as a political document. The mathematics teacher emphasizes exponential rates of expansion and decay to describe changes in the populations of plants and animals. The biology teacher focuses on the ecology and genetics of plant and animal biodiversity. And the foreign language teacher considers

the issue through contemporary Spanish publications.

When these multiple approaches focus on the same question, "Who will survive?" and when teachers and students routinely articulate this question, the effect is to create an underlying purpose and structure for their work. Further, the question encourages teachers to more closely coordinate activities and assessments. This degree of focus and coherence is virtually unheard of in high school programs and is not all that common in middle and elementary grades.

Characteristics of Guiding Questions

Not all questions are guiding questions. Knowing their characteristics is an important step toward including them in disciplinary and interdisciplinary curriculums. Figure 1 provides examples from units developed by teachers in Iowa, Massachusetts, and Ohio.

First good guiding questions are *open ended*, yet *focus inquiry* on a specific topic. For example, "Whose America is it?" is a good guiding question to explore American culture. The query specifies that knowledge about America is sought, but it invites a

wide-ranging and inclusive discussion by allowing that America may be different things to different people.

Second, guiding questions are *nonjudgmental*, but answering them requires high-level cognitive work, such as the development of a rich description, model, evaluation, or judgment. Note that none of the questions in Figure 1 dictates or even suggests one or more right (or wrong), or better (or worse) answers. Any one of them may be addressed in multiple ways. Moreover, these questions encourage thinking, because to answer them, the learner must ask other questions.

Third, good guiding questions contain *emotive force* and *intellectual bite*. Questions like "Whose America is it?" "Who will survive?" "Where does money go?" "What is waste?" and "When are laws fair?" have import. As students, educators, and world citizens, we must try to answer them. Indeed, questions like these could be used to guide K - 12 teaching and learning in national curriculums.

Guiding questions can also invigorate the study of localized issues and traditional disciplines. Kids will work hard to answer, "What is a good sneaker?" and "Who is a friend?" and "What is fun?" Math classes might puzzle over "What's a good proof?" Physics can profit from "Where do waves come from?" and "Where do they go?" Biology will be improved with "How are organisms related?" And English classes can try to answer, "What is a good book?"

Fourth guiding questions are *succinct*. They contain only a handful of words-yet they demand a lot. Often, long questions appear to be good candidates for guiding questions, but refining the question to be open ended, nonjudgmental, and important will generally economize it.

Focusing Curriculums

To see these characteristics in action, consider the following math/science/ special education unit on "sneakers" (the footwear), developed by two Boston high school teachers in a vocational program. The guiding question "What is a good sneaker?"

provokes a range of reactions from students. Some say a good sneaker is one that looks cool. Others answer that it can be bought at a bargain price. Still others indicate that a good sneaker won't wear out before it is outgrown. And other students suggest that a good sneaker provides excellent traction and ankle support on the basketball court. This variety emerges because the question reaches out to embrace multiple points of view and encourages links between sneakers and topics such as youth and cultural aesthetics, economics, adolescent growth patterns, and manufacturing and engineering.

At the same time, the question focuses the curriculum topics and student learning by insisting that all lessons answer the same guiding question. For example, consider these four activities:

1. Students use grinding wheels to test the abrasion resistance of soles of various sneaker brands.
2. Students survey sneaker prices at various shoe retailers, looking for relationships between brands, models, prices, store location, marketing, and clientele.
3. Students compare sneaker advertisements to discover what advertisers think consumers should value in sneakers.
4. Students visit a sneaker factory and pay special attention to the quality control process.

Though markedly different, these activities all belong to the same unit. Indeed, at any time, students and teachers can say, "We're doing this because we're trying to answer 'What is a good sneaker?'"

Questions That Do Not Guide

To clarify the characteristics of guiding questions, let's briefly

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examine two other kinds of common queries that do not serve as guiding questions. I call them *leading* questions and *generic* questions.

"Why is sexism bad?" is a leading question because it contains its own answer-sexism is bad-while apparently inviting intellectual exploration. Most students quickly recognize such questions, knowing that their purpose is not to explore the idea, but to advocate the conclusion. In contrast, a more thought-provoking and inclusive conversation will emerge from "What is sexism?" or "Where does sexism come from? Where does it lead?" Other examples of leading questions and their guiding question replacements appear in Figure 2.

Although they don't serve the purpose of guiding questions, leading questions are useful. If, for example, the topic is "food and hunger," the following will guide poorly: "Why is there inequitable distribution of food in the world?" "How many kilocalories per day does an average human need?" or

"What 15 crops account for nearly all the world's agricultural production?" Yet all three will directly contribute to "Where does hunger come from?"

In comparison, generic questions are exemplified by: "What is life?" "How do humans communicate?" or "Where do we find patterns?" These appear to be good guiding questions because they are open ended, nonjudgmental, succinct, and promote inquiry. And they have inclusive appeal because they can accommodate everyone's pet subject, favored activity, or personality. But like all generic notions, they lack personality, concrete referents, and intrinsic interest, especially for kids.

How Do Educators Write Good Guiding Questions?

Examine the topic, theme, or concept of the curriculum. For some of the preceding guiding questions, these would be "American government,"

FIGURE 1

Guiding Questions and Curriculum Subjects

- What is waste?
- Who is hungry?
- What is Christian courage?
- Where do waves come from?
- What is worth fighting for?
- Where do I belong?
- Who was a great person?
- What is health?
- What is a good house?
- When are laws fair?
- Recycling/garbage
- Food and hunger
- Christianity
- Physics
- Cultural values
- Adolescent identity
- Cultural values/history
- Health/Disease
- Art, architecture, vocational studies
- Government

species extinction," "sneakers," and sexism. "Begin to write questions that you believe will cause the students to think about the topic, but not dictate the direction or outcome of their thinking. In other words, write a succinct, open ended, nonjudgmental question that asks the students to evaluate the theme. Remember that in the case of an interdisciplinary curriculum, the guiding question must be accessible to all disciplines and learners.

Another way to generate possible guiding questions is to consider the six queries that newspaper articles answer: *who, what, when, where, how, and why*. An additional device is to put the word "good" in front of the theme or object. For example, "Who is a leader?" becomes "Who is a good leader?" and "What is music?" becomes "What is good music?" This is an easy way to create the call for judgment that is the hallmark of an effective guiding question. At other times, the topic itself is so provocative that judgment is implied in its discussion. A topic like sexism, survival, ownership, and fairness do not need to have "good" attached - to discuss them is to evaluate.

When generating guiding questions, write several questions without paying too much attention to how perfectly they fulfill the criteria of being: *nonjudgmental, open ended, intrinsically interesting, and succinct*. Rather, generate a list with several candidate questions. Then begin to refine the list. It is difficult to write more than two or three guiding questions for a curriculum because good guiding questions subsume other questions.

Here is an example from a recent workshop with middle school teachers southeast of Boston who were developing a curriculum to help kids critically examine advertising. In their effort to be concrete, the teachers were working with a commercial for M&M candies. As they played with their questions, however, they arrived at

slightly different, and ultimately more productive questions:

- What is an M&M?
- What is a good M&M commercial?
- How do commercials affect society?
- How do commercials convince consumers to buy?
- Why use animation?
- Why does the M&M company use commercials?
- What is entertaining in a commercial?
- Who watches commercials?
- Why blue M&Ms?
- What is the purpose of a commercial?

As the teachers worked through this list, they decided that the topic of commercials had enough intrinsic appeal that they did not need the specific commercial for M&Ms to drive the unit, although it would undoubtedly serve as one of their best examples. The teachers also noticed that some of the questions had too much information in them, such as "What is entertaining in a commercial?" or "How do commercials convince consumers to buy?" Other questions were too narrow, such as "What is the purpose of a commercial?"

Further refinements led the teachers to realize that they were ultimately interested in two interrelated aspects of commercials: the characteristics and functions of good commercials. This led the group to select two guiding questions: "What is a good commercial?" and "How does a commercial work?"

The teachers eventually centered on the perennially useful pair of questions that ask about the *what* and *how* of something. As with all good guiding questions, these two queries are not easily answered and should give educators and students room to explore.

In presenting this example, I do not say that these questions are the best of all questions. Readers may say that the first question, "What is

a good commercial?" subsumes the second question, "How does a commercial work?" because describing a good commercial entails discussing how it works. Or readers may prefer the question "Who watches commercials?" and think that it has more motivational power than the ones the teachers chose.

There are no perfect guiding questions; and the curriculum design team and school context influence the choice of guiding questions. Yet criteria to generate artful guiding questions can help. And when educators determine good guiding questions, much better curriculum units are bound to follow.

'I first encountered the idea of guiding questions in Heidi Hayes Jacobs' *Interdisciplinary Curriculum: Design and Implementation* (Alexandria, Va.: ASCD) 1989, p. 59).

FIGURE 2

Guiding Questions

- Who will survive?
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- What is a good sneaker?
- Where does money come from?
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- What is waste?
- How can good health be obtained?
- What is a good school?

Leading Questions

- Should species be allowed to go extinct?
- Why is Brand X better than Brand Y?
- Is there equitable distribution of wealth?
- Why should America recycle?
- Should there be national health care?
- How can schools be improved?

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